



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,127	11/27/2006	Tsuyoshi Oyaizu	280659US0PCT	2883

22850 7590 10/04/2007
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
RALEIGH, DONALD L	

ART UNIT	PAPER NUMBER
2809	

NOTIFICATION DATE	DELIVERY MODE
10/04/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/556,127

Applicant(s)

OYAIU ET AL.

Examiner

Donald L. Raleigh

Art Unit

2809

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/09/2005, 03/05/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2, 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al. (WO 03/019608 A1 as evidenced by US Patent No. 7,075,220).

Reference Claim 1:

Ito teaches:

An image display unit, (abstract line 1) comprising:

a face plate; (Fig.3,(10) and Col.5, line 64)

a rear plate (Fig.3 (12) and Col.5, line 66) disposed facing the face plate;

a large number of electron emission elements formed on the

rear plate; (Fig. 3 (11) and Col.5, line 65) and

a phosphor screen (Fig.3 (9) and Col.5, lines 64-65) emitting by an electron beam

emitted from the electron emission element, (Col.2, lines 45-47)

Art Unit: 2809

the phosphor screen (9) being formed on
an inner surface of the face plate (12)(Fig.3)
wherein the phosphor screen includes a light absorption layer (Fig.4, (5) and Col.6, line
19)
a phosphor layer,(Fig.4 (6) and Col.5, line 50) a metal back layer (Fig.4 (1) and Col.6,
line 17) having a separating portion,(Fig.4, it separates phosphor screen from getter
layer (3))
the metal back layer (Fig.4 (1)) being formed on the phosphor layer,(Fig.4 (6)) a
high-resistance covering layer (Fig.4 (13) and Col.6, line 20) formed on the separating
portion of
the metal back layer in such a way as to be laid across the metal
back layer of both sides of the separating portion, a heat-resistant
fine particle layer (Fig.4 (2) and Col.5, lines 57-58) formed on the high-resistance
covering layer (Fig.4 (13))
and a getter layer (Fig.4 (3)) formed in a film shape above the metal back layer (Fig.4
(1))
and divided by the heat-resistant fine particle layer.(Fig.4 (2) shows getter (3)divided by
heat resistant layer (2))

Art Unit: 2809

Reference Claim 2:

Ito teaches:

Wherein the separating portion of the metal back layer (Fig.4 (2 & 13)) is positioned on the light absorption layer.(Fig.4 (5) and Col.6, line 19)

Reference Claim 4:

Ito teaches:

Wherein an average particle size of the heat-resistant fine particles is from 5 nm to 30 μm . (Col.5, lines 19-20)

Reference Claim 5:

Ito teaches:

Wherein the heat-resistant fine particle is a particle of at least one kind of oxide selected from SiO_2 , TiO_2 , Al_2O_3 and Fe_2O_3 . (Col.5, lines 15-17)

Reference Claim 6:

Ito teaches:

Wherein the getter layer (3) is a layer of a metal selected from Ti, Zr, Hf,

Art Unit: 2809

V, Nb, Ta, W, and Ba, or of an alloy containing at least one kind of these metals as a main constituent. (Col.5, lines 41-43)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US Patent No. 7,075,220) in view of Ito et al. (US Patent No. 6,841,926) and further in view of Ohnishi (US Patent No. 6,800,995)

The teachings of Ito (220) have been discussed above.

Reference Claim 3:

Ito (220) fails to teach:

Wherein the high-resistance covering layer has a surface resistance of from 1×10^3 to $1 \times 10^{12} \Omega/\square$

Ito (926) teaches: (Col.2, lines 64-65 a high resistance layer with resistivity of 10^2 to $10^8 \Omega/\square$.)

Art Unit: 2809

Furthermore, Ohnishi teaches (Col.12, lines 50-54 a high resistance layer with a resistivity of 10^7 to $10^{14} \Omega/\square$.)Together, these 2 patents cover the entire range of 1×10^3 to $1 \times 10^{12} \Omega/\square$.

It would have been obvious to one of ordinary skill in the art to apply the teachings of Ito (926) as modified by Onishi to Ito (220) and combine the two resistivity ranges because this is an acceptable range to provide adequate charge protection and reduce power consumption (Onishi Col. 12, lines 44-49).

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Raleigh whose telephone number is 571-270-3407. The examiner can normally be reached on Monday-Friday 7:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Nguyen can be reached on 571-272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2809

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DLR


KIMBERLY D. NGUYEN
PRIMARY EXAMINER
9/28/07